

**WORK ASSIGNMENT NO. 7 PURSUANT TO
THE JULY 13, 2010 AGREEMENT BETWEEN THE
CITY OF VENICE, FLORIDA AND STANTEC CONSULTING SERVICES, INC.**

WHEREAS, on July 13, 2010 the parties entered into an Agreement whereby the ENGINEER would perform professional services for the OWNER pursuant to an executed Work Assignment; and

WHEREAS, the OWNER wishes to authorize the ENGINEER to perform professional services concerning design of the **Border Road Water Main Extension** as more particularly described in the Scope of Services herein; and

WHEREAS, the ENGINEER wishes to perform such professional services.

NOW THEREFORE, in consideration of the premises and mutual covenants contained in the July 13, 2010 Agreement and in this Work Assignment, the parties agree as follows:

1. General description of the project. The project will include engineering services related to the extension of the existing City 12-inch water main east on Border Road to the intersection of Jacaranda Boulevard.
2. Scope of services to be performed. ENGINEER shall perform the services described in the Scope of Services attached as Attachment "A".
3. Compensation to be paid. OWNER shall pay the ENGINEER the sum of \$272,875 for performance of the professional services specified in this Work Assignment.
4. Time for completion. ENGINEER shall complete the professional design services specified in this work assignment within 300 days from the date of this work assignment, and will provide the bidding and construction phase services in accordance with the construction schedule to be determined by OWNER.

IN WITNESS WHEREOF, the parties have executed this work assignment on the ____ day of ____, 2014.

ENGINEER



CITY OF VENICE, FLORIDA

By: _____

Mayor

ATTEST:

Attachment "A"
City of Venice Utilities Department
Scope of Services
Border Road Water Main Extension

I. INTRODUCTION AND PROJECT DESCRIPTION

The City of Venice Utilities Department is planning to expand the existing City water service along Border Road to serve areas east of the current infrastructure in anticipation of community water needs in the vicinity of Border Road and Jacaranda Boulevard. The proposed water main will be a 12 inch diameter pipe that will connect to the existing 12-inch water main on Border Road, approximately 600 feet west of N. Auburn Road. The pipeline will run east for approximately 6,000 feet to the intersection of Border Road and Jacaranda Boulevard. The new water main will be designed to cross under I-75 using directional drill techniques. This crossing requires close coordination and the approval of the Florida Department of Transportation. The water main will serve predominantly as a transmission main to deliver water to the major developments, however, provisions will be made in the water main design to allow intermediate connections in key locations along the route in the future.

II. SCOPE OF SERVICES

Stantec Consulting Services Inc. will provide professional engineering services for; pipe route evaluation, design development, preparation of technical specifications, permitting, bidding, and construction phase for the project described above. This scope and fee was developed in anticipation that the project will be designed, permitted and constructed in a generally typical timeframe as indicated in the project schedule.

III. TASKS

TASK 1 – MEETINGS AND COORDINATION

Upon receipt of the Notice to Proceed, Stantec will schedule a project kick-off meeting with City staff to discuss project preferences, drawing standards, schedules, and suggested methods to expedite the work. Minutes from the meeting will be summarized and distributed by Stantec. Readily available as-built information for the City water utility system will be provided by City staff closely following issuance of the Notice to Proceed. Additional information that may be available and helpful as design progresses will be requested of City personnel on an as-needed basis. A total of 1 kickoff meeting was included in developing this scope and fee. Additional design review meetings are included in applicable sections of this scope.

TASK 2 – ROUTE STUDY

Stantec will investigate the existing corridor for appropriate pipeline alignment on the north versus the south sides of the rights-of-way. The evaluation will include conducting an existing conditions survey, an environmental survey, and a cultural resource assessment (archeological). The specific surveys and assessment scope details are provided below.

2.1 Conditions (Topographic) Survey

Stantec will coordinate with a professional land surveyor for an existing conditions topographic survey as follows:

- The survey sub-consultant will prepare, by terrestrial field survey methods, an existing conditions base map (topographic survey) of the proposed construction corridor. The survey will use the existing record plans for the Border Roadway Design from 2002 by George F. Young, Inc. for the east most 3000 feet of the project and will verify critical aspects of the survey. New survey will occur at the intersection of Jacaranda Blvd. and Border Road, and for the west end of the project (from water main connection west of Auburn, through the intersection at I-75 to the Border Road Roadway Design).
- The topographic data map will be prepared at 1"=20' display scale with sufficient spot elevations at tops, depressions, saddles and in other areas as needed to depict the topography of the ground.
- The following visible features will be included within the survey limits: edge of pavement for all paved surfaces including curbs, curb cuts, parking lots, drives and shoulders, dirt roads and drives, trails, sidewalks, concrete pads, fences and walls, signs, utility poles, manholes, CATV and telephone boxes, storm drainage structures, water valves, mail boxes, meters, fire hydrants and visible indications of other utility systems, ditches, streams, outlines of apparent wetlands, bulkheads, bridges and other pertinent features.
- The field survey will verify visible and accessible below grade attributes of storm water and sanitary sewer systems (if accessible and include inverts, pipe sizes and material), tree species and diameter, jurisdictional wetland limits (as identified and mapped on the ground by Stantec) and other observed pertinent physical features.
- Cross sections will be taken at one hundred foot (100') intervals for new survey areas. Horizontal and vertical control points will be set along the route at approximately six hundred foot (600') intervals.
- Horizontal data will be expressed in state plane coordinates, Florida West Zone, North American Datum 1983. Vertical datum will be expressed in National Geodetic Vertical Datum of 1929 (NGVD 1929).

2.2 Environmental Assessment

Stantec's ecologists will perform an assessment of the proposed water main corridor for the presence of jurisdictional wetlands and surface waters, listed wildlife species and their habitats. An initial assessment of potential resources will be performed by compiling environmental and natural resource data from published and proprietary sources in Stantec's geographic information system (GIS) databases to produce a base field map. Areas of concern within and immediately adjacent to the proposed project boundary will then be assessed in the field and wetlands/other surface waters jurisdictional to the US Army Corps of Engineers (USACE) and the State of Florida will be delineated in accordance with methodologies published in the 1992 Corps Manual for the Delineation of Wetlands and Chapter 62-340 of the Florida Administrative Code, respectively. Delineated wetlands will be located by the project surveyor and a scaled map of all relevant wetlands and surface waters will be prepared.

2.3 Resources Assessment

Stantec will retain the services of an archaeological consultant to perform a cultural resource assessment survey for the proposed project corridor as may be required by the Florida Division of Historical Resources. The assessment will include background research and a field survey in order to assess the probability of the presence of historical properties. The purpose of this survey will be to locate and assess any cultural resources that may be present. The resultant survey report will conform to the specifications set forth in Chapter 1A-46, Florida Administrative Code, and will be sufficient to satisfy anticipated conditions of the FDEP Environmental Resource Permit.

2.4 Permit Requirements

Stantec will conduct pre-application meetings (where appropriate meetings will be by telephone) with the permitting agencies, FDEP, FDOT, SWFWMD, SCDOH, and SC Development Services to determine any specific design criteria, type of permit required, and confirm permit application review fees.

2.5 Study Technical Memorandum

Based on the surveys and assessment, two potential routes will be considered. Preliminary alignments will be prepared for each route, design requirements will be considered and preliminary cost estimates prepared. Recommendations for selection of the route will be developed in consideration of cost, constructability, environmental impacts, and direct input from the City Utility staff. A Technical Memorandum will be prepared to include the investigation results as well as a recommendation for the project pipeline route.

TASK 3 – 30% DESIGN DEVELOPMENT

3.1 30% Design Plans Development

Based on the recommended pipeline route from the Route Study Technical Memorandum a set of plans will be developed to a 30% level of design. The 30% design plan set will include a view of the entire water main route and will show the location of the proposed water main along with the pipe material, size, and installation method. Locations will be developed for isolation valves and air release valves (ARV locations and numbers may change considerably once the profile alignment is established). The plans will be shown on base utility maps. The preliminary layout will include location of the connection to existing water main and known future connections. The plans will also show the known existing utilities and environmentally sensitive areas.

City standards and details will be used to prepare the design plans. Standard engineering practice for designing water main systems will also be used. The drawing set will include a cover sheet, general note sheet, index/key sheet, and plan sheets for the pipeline, which will be at a scale of 1"=20'.

3.2 Geotechnical Services

Stantec will retain the services of a professional geotechnical firm to provide geotechnical exploration services. Up to thirteen (13) Standard Penetration Test (SPT) borings to a depth of 10 feet and two (2) SPT borings to a

depth of 60 feet will be performed (at approximately the east and west sides of I-75). They will perform continuous sampling from the ground surface to a depth of 10 feet, then sampling at 5-foot intervals at the greater depths. Prior to mobilization of their crew, underground utility locations will be determined via the 811 One-Call Service.

3.3 Subsurface Utility Locate Services

Stantec will retain a subconsultant for professional subsurface utility locate services. Services to be provided are as follows:

- Prepare and request appropriate permits from governmental agencies for the purpose of marking, measuring, and recording the location of underground utilities within the project area.
- Provide traffic control within the work areas while designating and locating the subsurface utilities. Traffic control is to be maintained in accordance with applicable standards. Provide safety devices, signs and/or other safety equipment. Traffic control will be provided by Stantec's subconsultant.
- Utilizing conventional electronic designating equipment and including Ground Penetrating Radar (GPR), designate and mark the horizontal location of found underground utilities along the selected pipeline route.
- Provide test holes (VVH – verified vertical and horizontal) on each found utility line in conflict with (perpendicular to) the proposed water main extension along Border Road.
- For each test hole, neatly cut and remove existing pavement (not to exceed 225 square inches per cut) or other surface material. Excavate the material through the cut down to the utility in a way that prevents damage to wrappings, coatings or other protective coverings of the utilities (i.e. vacuum/pressure excavations, hand digging, etc.). Backfill and compact with select material around the utility. Provide a restoration of the surface pavement, within the limits of the cut, at the time of the backfill.
- Surveyor will collect found utility information, and provide a Surveyor's Report reflecting VVH test hole information depicting the designation and VVH test hole information. This information will be added to the topographic survey.

3.4 Utilities Coordination

Stantec will submit copies of the design documents to utility companies for coordination of conflict avoidance or specific design details. Stantec will host a utility coordination meeting with the private utilities to identify potential conflicts associated with the 30% design. The meetings will be held at Stantec's office. City of Venice will be invited to the meeting, along with Sarasota County, FDOT, and other interested parties.

3.5 Preliminary Engineers Opinion of Cost

A preliminary engineer's opinion of probable cost (EOPC) for the project will be prepared.

3.6 Deliverables

Stantec will deliver the following items as part of the milestone submittal:

- Five (5) hard copies of the cover letter summarizing the status of tasks included in the milestone submittal
- Five (5) bound hard copies of the 30% design plan set (3 sets of 11"x17" and two sets of full size drawings)
- Five (5) hard copies of engineer's opinion of probable cost
- One (1) CD with electronic files (PDF) of deliverables listed above

3.7 30% Design Review Meeting

Stantec will attend a 30% design review meeting with the City.

TASK 4 DETAILED DESIGN (60% AND 100%)

4.1 60% Design Plans

Water main system pipeline (60% milestone) plans will be prepared in accordance with the comments received at the 30% design review meeting. Profiles will be developed showing known utilities crossing the water main along the route. Horizontal Directional Drill (HDD) bore calculations will be performed on all HDDs to ensure pipe stress limits are not exceeded. A copy of the HDD bore calculations will be included in the 60% milestone submittal.

Stantec will prepare a Maintenance of Traffic (MOT) plan for the construction of the project. The pipe will include roadway crossings and construction activities may impact right lane though traffic at times. The MOT plan will consist of closing the lane adjacent to the active work location and will consist of a key sheet, a general notes sheet, a typical section sheet and a plan sheet.

4.2 Technical Specifications

A set of technical specifications will be developed for the City to incorporate with their front end contract documents. Measurement and payment section will be provided along with proposed bid form.

4.3 60% Design Deliverables

Stantec will submit copies of the 60% level plan set, technical specifications, and engineer's opinion of probable cost to City staff for review and comment. City standards and details will be used to prepare the design plans. The drawing set will include a cover sheet, general note sheet, index and key sheet, details, plan and profile sheets for pipelines, which will be at a scale of 1"=20'. Stantec will deliver the following items as part of a 60%

milestone submittal:

- Five (5) copies of the cover letter summarizing the status of the Design and Permitting task
- Five (5) bound hard copies of the 60% design plan set (3 sets of 11"x17" and two sets of full size drawings)
- Five (5) hard copies of the technical specifications
- Five (5) copies of the horizontal directional drill bore calculations
- One (1) CD with electronic files (PDF) of deliverables listed above

4.4 60% Design Review Meeting

Stantec will attend a 60% level plan review meeting with the City. Comments will be taken and documented. Minutes of the meeting will be distributed to the attendees.

4.5 100% Design Plans

Following the 60% review meeting, Stantec will incorporate pertinent City comments to complete the water main pipeline design, including additional details and sections for special construction conflicts and crossings for the 100% level plan set submittal.

4.6 100% Technical Specifications and EOPC

Technical specifications will be completed and will include the measurement and payment section with a bid form including all measured quantities for bid items. The EOPC will be updated for the 100% milestone submittal.

4.7 100% Design Deliverables

100% design documents will be provided to the City. The deliverables for the 100% Milestone submittal will include:

- Five (5) copies of the cover letter summarizing the status of the Design and Permitting task
- Five (5) bound hard copies of the 100% design plan set (3 sets of 11"x17" and 2 sets of full size drawings)
- Five (5) hard copies of the technical specifications
- Five (5) hard copies of engineer's opinion of probable cost
- One (1) CD with electronic files (PDF) of deliverables listed above

4.8 100% Design Review Meeting

Stantec will attend a 100% level plan review meeting with the City. Comments will be taken and documented. Minutes of the meeting will be distributed to the attendees.

4.10 Bid Documents

Stantec will correct errors and clarify notes and details based upon City comments to complete and finalize the plans for the Construction Plan Bid Set. Stantec will update the Technical Specification's and EOPC based on the comments received from the City at the 100% milestone review meeting.

4.11 Document Deliverables

Final bid documents will be provided to the City. The final deliverables for the Design task will include:

- One (1) unbound hard copy each (22"x34" and 11"x17" signed/sealed drawings)
- Two (2) bound hard copies (22"x34" signed/sealed drawings)
- One (1) unbound hard copy of technical specifications signed/sealed
- One (1) hard copy of the bid Form
- One (1) hard copy of engineer's opinion of probable cost
- One (1) AutoCAD file of the topographic survey base map and construction plans
- One (1) CD with electronic files (PDF) of deliverables listed above

TASK 5 PERMITTING

5.1 General Permits

Stantec will prepare and submit applicable FDOT and FDEP permit applications to the City for execution and submittal to reviewing agencies. Anticipated permits and associated fees are as follows:

- FDOT - Permit Fee – no charge
- FDEP/ SCDOH - Permit Fee - \$950
- SWFWMD ERP (discussed below) - Permit Fee - \$710
- SC ROW Use – Permit Fee – No Charge

Stantec will respond to Requests for Additional Information from permitting agencies and incorporate applicable comments into the design documents following discussion with City staff.

5.2 Environmental Resources Permit

Stantec will schedule and conduct a pre-application meeting with Southwest Florida Water Management District (SWFWMD)/Florida Department of Environmental Protection (FDEP) staff to review the project concept, discuss existing site conditions, verify the type of permit required, and identify specific concerns (if any) that need to be addressed in the permit application. Environmental narratives and exhibit/drawing details will be prepared as required for submitting a joint statewide environmental resource permit application to SWFWMD/FDEP for a General Environmental Resource Permit for the Installation, Maintenance, Repair and Removal of Underground Cable, Conduit, or Pipeline as defined in 62-330.453 Florida Administrative Code and a USACE Nationwide 12 (if warranted). The above scope assumes that directional drilling will be used to avoid or minimize wetland impacts

to the extent practicable and that all standard conditions of either a General ERP and/or nationwide authorization can be met.

The Border Road project site is located within the limits of known wood stork "core foraging areas." However, Stantec assumes that the area of USACE wetland impacts (if any) can be kept below 0.5 acre and that processing the wood stork determination key will indicate the project will not adversely affect the species, obviating the need for a US Fish and Wildlife Service (FWS) consultation.

Stantec's scope does not include preconstruction surveys for Gopher Tortoises and Florida Sandhill Cranes nor permitting and executing Gopher Tortoise relocations if necessary. This scope likewise does not include Eastern Indigo Snake protection training for construction workers (if required by a USACE – NW authorization).

5.3 Permit Fee Allowance

Permit fees for this project will be paid on behalf of the City by Stantec. A permit allowance of \$2000 is included in the fee proposal and will be invoiced in accordance to the actual fee amounts required at the time of permit submittal.

TASK 6 – BID PHASE SERVICES

The following Bidding & Construction work items will be performed:

- 6.1 Respond to contractor design related comments on the contract documents and prepare technical response for addenda.
- 6.2 Attend a pre-bid meeting.
- 6.3 Review Contractor bids and references for conformance with bid requirements. Prepare bid tabulations and written award recommendation for the project.

TASK 7 – ENGINEER OF RECORD (EOR) SERVICES

7.1 Meetings and Field Visits

- Participate in preconstruction conference.
- Attend monthly construction progress meetings.
- Periodic field visits to review work in progress.
- Witness field testing as required.

7.2 Document Review

- Provide signed and sealed construction plans for the contractor to use in obtaining the design related construction permit.
- Review shop drawings supplied by the contractor for general conformance with the design concept of the project and information given in the technical specifications.

- Review and approve, as applicable, the contractor's applications for payment and accompanying data, schedules, and schedule of values.
- Issue necessary interpretations and clarifications of the contract documents including Requests for Information (RFIs).
- Review Interim Field Change Agreements (IFCAs) as initiated or recommended by the City, Engineer, or the Contractor for the scope of work described in the project description.

7.3 Project Close-out

- Review record drawings provided by the contractor's surveyor prior to final certification. Provide listing of deficiencies as may apply.
- Attend the final walk-through and prepare a final punch list.
- Prepare final certificates of completion of construction for acceptance of the project by the appropriate agencies.

All work shall be charged on an hourly basis in accordance with the fee section of this work assignment. Many facets that control the length of the project and necessary effort are outside the control of Stantec. Hours shown in this work assignment are only estimates.

TASK 8 – CONSTRUCTION OBSERVATION SERVICES

- 8.1 Construction Inspection (estimated 7 months) – Construction observation, estimated at 400 hours, will be provided on-site by Stantec. Daily reports will be completed when Stantec performs inspection services.
- 8.2 Contract Administration – Contract administration is estimated at 160 hours which includes office support, attendance at meetings and some on-site presence. Specific duties of the Construction Administrator are as follows:
- Prepare for and attend the preconstruction meeting and periodic construction progress meetings, including the preparation of agendas and meeting notes. It is anticipated that monthly progress meetings will be held for this project.
 - Review Design Issues – Provide clarifications and interpretation of drawings and technical specifications from the Engineer of Record.
 - Log and respond to contractor requests for information.
 - Assist with the review and approval of draft pay applications, submittals, shop drawing logs, material samples, results of tests and inspections, bypass plans, and other data, which the contractor is required to submit. Determine the acceptability of materials, substitute materials and equipment proposed by the Contractor. Receive and review maintenance and operating instruction manuals, Primavera schedules, guarantees, bonds, and certificates of insurance, which are to be assembled by the Contractor in accordance with the Contract Documents.
 - Provide project management of field staff and provide support to the City's project manager with administrative items.

8.3 Project Close-out

Provide project close-out tasks including substantial completion inspections, creating of final deficiencies list, record drawing coordination, certification coordination, acquiring final lien releases, final inspection, final pay request review and other necessary items to complete the project.

IV Fee Proposal

The proposal fee for the above scope of work (Tasks 1 through 6) will be charged as a lump sum and will be invoiced monthly based on percentage completion of each task. Construction phase services (Tasks 7 and 8) will be charged on an hourly rate basis on the actual time spent on the project). The following table shows the fee by task.

This Work Assignment includes an Owner's Allowance of \$25,000 for unforeseen tasks required to complete the project, which will be used only with the written approval of the City. A scope description and fee breakdown will be provided to the City for any proposed use of the Owner's Allowance.

Fee Proposal			
Task	Description	Basis	Fee
1	Meetings and Coordination	LS	\$ 994
2	Route Study	LS	\$37,471
3	30% Design Development	LS	\$38,394
4	Detailed Design (60% and 100%)	LS	\$51,155
5	Permitting	LS	\$7,975
6	Bid Phase Services	LS	\$9,328
7	Engineer of Record Services	HR	\$27,910
8	Construction Observation	HR	\$72,648
	Subtotal		\$245,875
	Permit Fee Allowance		\$2,000
	Owners Allowance		\$25,000
	Total		\$272,875

V. Schedule

The project schedule is outlined below. The schedule provides time from start to completion of each task in calendar days from notice to proceed. The notice to proceed will be effective the date this Work Assignment is approved by the City.

Project Schedule (Calendar Days from Date of Work Assignment)			
Task	Description	Start	Complete
1	Meetings and Coordination	1	300
2	Route Study	1	110
3	30% Design Development	110	180
4	Detailed Design Development (60% and 100%)	180	300
5	Permitting	180	300
6	Bid Phase Services	Per City Schedule	
7	Engineer of Record Services	Per City Schedule	
8	Construction Observation Services	Per City Schedule	

Total time estimated for the Route Study and Design Development is 300 days. This timeframe includes 14 calendar days of City review for each milestone submittal. Anticipate Procurement, Award and Completion of Construction an additional 330 days.